

Gus says: Quit Your Skidding

"OU may have been beautiful on a tree, but you're only a danged nuisance now," muttered Gus Wilson, veteran mechanic of the Model Garage, as he vigorously wielded a broom on a layer of damp leaves stuck to the concrete in front of the gas pump. "Morning, Joe," he called to his part-

"Morning, Joe," he called to his partner, as the latter arrived with his lunch kit swinging at the end of his skinny arm. "Better dump a quart of oil in the service car and see that there's gas in the tank. With the ground covered with leaves, and that rain last night, I have a hunch we're going to get some calls today."

"What have the leaves and the rain got to do with service calls?" Joe asked, "It's all dried up now, anyhow."

"Come out with me on the first call we get and you'll see," replied Gus, as he went on with his sweeping.

Before an hour had passed, the phone bell shrilled and Joe popped out of his little office.

"You win, Gus! Let's go," he called as he climbed into the service car and motioned to the boy to swing the doors open.

"Drive down Center Street till you come to the bend just beyond Locust Avenue," Joe directed, as Gus piloted the service car out into the street. "Mrs. Dean phoned she's barged right off the pavement onto somebody's yard—says the steering gear's gone haywire. Nobody's hurt, she says." "Maybe it is the steering gear, but I'll

bet you a cookie it isn't," said Gus, When the garagemen arrived on the By MARTIN BUNN

scene, Mrs. Dean, pale and trembling, was staring fixedly at the front wheels of the car. "Oh, Mr. Wilson! Can you fix it right away?" she gasped, as Gus climbed out of the service car. "Mr. Dean will be so angry with me if he finds out I've had an accident. You know I haven't been driving long."

"Don't worry, Mrs. Dean. We'll take care of things," Gus assured her, as he walked back up the road and critically examined the tracks the wheels had made in going off the road.

"What did I tell you, Joe!" demanded Gus, pointing to where the tell-tale sliding streak of the tire started on a part of the road that was covered with wet leaves.

"Did you put on the brakes as you came down the grade here, Mrs. Dean?" he asked.

"Only the tiniest little bit," she replied.
"I wasn't going fast, and I wouldn't have
put on the brakes at all only I was going
to stop at Mrs. Foster's, three houses
farther on."

"That's funny," said Gus. "You shouldn't have gone into such a bad skid unless something is binding on that wheel. I'll take a look."

Gus got out the jack and a wide piece of board to keep it from sinking into the soft turf. As soon as the tire was clear of the ground, he grabbed the wheel and gave it a vigorous twist. It turned stiffly with a rumbling, grating sound.
"Humph!" Gus grunted. "Roller bearing broke—doesn't happen often these days. Drive down to the shop, Joe, and get a new set while I take these out."

"Then it wasn't the steering gear, after all!" exclaimed Mrs. Dean. "And it wasn't even my fault, was it, Mr. Wilson? Surely I'm not to blame if that roller thing busted, am I?"

Gus laughed. "Not directly, Mrs. Dean. But you wouldn't have landed on this lawn if you hadn't put the brake on just when you did. Probably you didn't know that a coating of wet leaves on a road is pretty near as treacherous as a sheet of ice. And you're most likely to get into trouble on a day like this, when every-thing looks perfectly dry. It rained last night and, although the top leaves are dry, they're wet and slimy underneath. The tire sticks to the top leaves all right, but the wet, slippery ones beneath act like a rug on a polished floor. Putting on the brake, even just a little, started the slide because of that stiff bearing, but, even if the bearing had been O.K., you'd have landed here just the same if you'd been going a bit faster and put on the brake a bit harder."

"The mere thought of skidding makes me feel faint and shaky," said Mrs. Dean. "This is the second one I've had. You feel so absolutely helpless when the car starts to slide and you can't stop it. And there doesn't seem to be any way of learning what to do about it." (Continued on page 118)



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GUS SAYS: QUIT YOUR SKIDDING! (Continued from page 58) Gus wiped the grease from his hands. The hub was dismounted, and there was nothing more to be done until Joe returned with the new parts.

"Learning what to do about a skid by actually trying it would be one way," Gus smiled, "but you'd stand a fine chance of wrecking the car and landing in the hospital. The thing to do, Mrs. Dean, is to learn how to avoid a

"I'd be very grateful if you could teach me

that," Mrs. Dean suggested.

"Well," Gus began, "the first thing to learn is to keep your brakes in good shape. If the brakes on one side of the car are holding stronger than on the other side, you are likely to skid out of line even on dry pavement when you have to jam on the brakes in an emergency. That would mean an accident if you happened to be driving close to a line of other cars, so that swinging out would mean hooking hub caps or bumpers with one of them. Any time you notice that the car seems to have a tendency to swing to one side when you put the brakes on hard, have your brakes examined right away."

"I WON'T have to worry about that. Mr. Dean is very fussy about the brakes," Mrs. Dean interrupted.

"I know he is," said Gus. "I only mentioned it so that if he happens to be away on a trip and the brakes don't seem to be working

right, you won't let it go till he gets back.
"Now," Gus continued, "a skid always follows when at least two wheels lose their hold on the road surface, or even one wheel if you are going around a sharp corner and the weight is nearly all on the outside wheels. Skids mostly are started when the motion of the car is being changed. Going around a corner is changing the motion of the car. So is putting on the brakes or speeding up. And, as putting on the brakes changes the motion fastest of all, doing this when you're going around a curve, makes it twice as hard for the tires to stick to the road. That's why most skids come on the turns.

"But your car can go into a skid even when it's moving straight ahead at a uniform speed. In that case, the crown of the road may be partly to blame, because when a car is tipped sideways on a surface that is not level, it nat-

urally wants to slide sideways.

"Once," Gus explained, "I was driving down a wide, smooth boulevard that had only a little crown to it. It started to sleet so that it formed a thin sheet of shiny, smooth ice. My car, no matter how carefully or slowly I drove, slid right off the road into the gutter and I couldn't go on till I'd put on the chains. So far as I could see, all the other cars on the road that didn't have chains on were having the same trouble. Of course, if the road had been dead level, I could have gone on; still, it would have been mighty dangerous, because, on a surface like that, it would have been impossible to stop in a hurry."

I'VE been told you don't need chains with these new, big tires," Mrs. Dean objected. "Don't let anyone fool you that way," growled Gus, as Joe drove up with the new bearing and the gray-haired mechanic set to work to assemble the hub. "When the roads

are covered with glare ice, there isn't anything except a pair of steel chains that will make

driving even reasonably safe, "Of course," Gus went on, as he smeared a liberal supply of grease on the new set of rol-lers, "the broad treads of the new tires hold better in mud or snow than the skinny tires we used to use, but rubber won't bite into the surface of glare ice, and that's what you need when its just barely freezing and the ice is extra slippery.

"Next to ice," said Gus, "come wet leaves as a cause of dangerous skids-mainly because lots of motorists don't realize that the leaves are slippery till it's too late. After ice has been on the ground for quite a while, dust and dirt settle on it and it isn't quite so slippery. But the longer wet leaves stay on the ground, the more slimy and slippery they get.

"Most people think that you'll never skid on a concrete road. It's true that dry concrete gives fine traction and even when it's wet the traction is pretty good, but I've seen some bad skids on concrete in places where a lot of sand blows on the road. If you try to go around a corner too fast on a sand-covered concrete road, the tires start to roll sideways on the grains of sand just like they were so many little ball bearings."

"You'd have to keep a sharp eye on the road, to spot all those different kinds of things before you get to them," Mrs. Dean observed.

"THAT'S the point, exactly," replied Gus, as he snapped the hub cap in place. "Keep your eye on the surface of the road ahead, and as soon as you spot anything that doesn't look just right-especially if it's at a turn-slow down right away while you still have good surface under you to slow down on. Then, by the time you get to the danger spot, you can slide over it at slow speed without using your brakes and there won't be much chance of a skid."

"But suppose you do skid," Mrs. Dean asked, "what do you do then?" "If it's a back-wheel skid, turn your front

wheels so they'll pull the front of the car in the direction the back wheels are sliding so as to prevent the front of the car acting as a pivot for the back to swing around. At the same time, take your foot off the brake, let in the clutch, and give it just a touch of the accelerator.

"If it's a front-wheel skid, there isn't much you can do except take off the brake, if it's on, and pull your wheels back to straight again.
"And," Gus finished with a grin, "no mat-

ter what kind of a skid it is, say your prayers and say 'em quick!"

NAVY TELLS OF TIME AIRSHIP STOOD ON END

Ir sroop on end, statisticians once said of the U. S. Navy dirigible Los Angeles, the 658-foot craft would tower above all but New York's ten highest skyscrapers. Reviewing the career of this veteran airship, now retired from service, naval authorities recently revealed that once it actually did stand on end!

It was a feat, officials declare, that never has been executed by any other airship and probably never will be. With twenty-five officers and men aboard, one calm afternoon, the Los Angeles rode at her Lakehurst, N. J., mooring mast in a gentle land breeze. Without warning, a sea breeze sprang up in exactly the opposite direction. The colder incoming air caught the ship directly under the tail and lifted it. Before ballast could be shifted or other means taken to trim the craft, it was standing on its nose, with the tail up at an angle between eighty-five and ninety degrees.

Swiveling on its nose spindle, the topsy-turvy airship then faced about into the sea breeze and came to rest on an even keel. The men aboard, tossed about as they were, had not even a scratch to show for their remarkable experience. The Los Angeles showed unsuspected strength by this freak demonstration but a second performance was not desired. The incident hastened the discarding of the tall mooring mast then used, in favor of low, stub masts which permit the stern of an airship to be anchored to a traveling carriage on circular rails.

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